



NASA
Procedural
Requirements

COMPLIANCE IS MANDATORY

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Property, Plant, and Equipment and Operating Materials and Supplies

Responsible Office: Office of the Chief Financial Officer

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Preface

P.1. Purpose

This NASA Procedural Requirements (NPR) document provides the financial management requirements for the identification, valuation, recognition, and reporting of capitalized Property, Plant, and Equipment (PP&E) and Operating Materials and Supplies (OM&S).

P.2. Applicability

This NPR is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers. This language applies to Jet Propulsion Laboratory, a Federally Funded Research and Development Center, other contractors, grant recipients, or parties to agreements only to the extent specified or referenced in the appropriate contracts, grants, or agreements.

The unique Work Breakdown Structure (WBS) requirements, which includes the Alternative Future Use Questionnaire (AFUQ), NASA Form 1739, in this NPR is not applicable to contracts awarded prior to October 1, 2007; however, the requirement is applicable to new work negotiated per contract modification after October 1, 2007, unless a written waiver is received from the Agency Director of Financial Management.

P.3. Authority

- a. Chief Financial Officers (CFO) Act of 1990, Pub. L. No. 101-576, 104 Stat. 2838 (1990).
- b. Government Management Reform Act (GMRA) of 1994, Pub. L. No. 103-356, Â§ 403, 108 Stat. 3410 (1994).
- c. Federal Financial Management Improvement Act (FFMIA) of 1996, Pub. L. No. 104-208, Â§ 801, 110 Stat. 3009-314, 3009-389 (1996).
- d. Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations, 2 C.F.R., pt. 215.
- e. Federal Property Management Regulations (FPMR), 41 C.F.R. ch. 101.
- f. Federal Acquisition Regulations (FAR), 48 C.F.R. ch.1.
- g. OMB Circular No. A-11, Preparation, Submission, and Execution of the Budget, Section 33 and Appendix B.
- h. OMB Circular No. A-110, Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations.
- i. OMB Circular No. A-123, Management's Responsibility for Internal Control.
- j. OMB Circular No. A-127, Financial Management Systems.
- k. OMB Circular No. A-136, Financial Reporting Requirements.
- l. NASA Policy Directive (NPD) 9010.2, Financial Management.

- m. Accounting Standards Codification (ASC) 730, Research and Development.
- n. Statement of Federal Financial Accounting Standards (SFFAS) No. 3, Accounting for Inventory and Related Property.
- o. SFFAS No. 6, Accounting for Property, Plant, and Equipment (as amended by SFFAS Numbers 14, 16, and 23).
- p. SFFAS No. 8, Supplementary Stewardship Reporting (as amended by SFFAS Numbers 16 and 23).
- q. SFFAS No. 10, Accounting for Internal Use Software.
- r. SFFAS No. 29, Heritage Assets and Stewardship Land.
- s. SFFAS No. 35, Estimating the Historical Cost of General Property, Plant, and Equipment.
- t. Federal Accounting Standards Advisory Board (FASAB), Federal Financial Accounting Technical Release 7, "Clarification of Standards Relating to the National Aeronautics and Space Administration's Space Exploration Equipment."

P.4. Applicable Documents

- a. NASA FAR Supplement (NFS), 48 C.F.R. pts. 1801-1852.
- b. NPD 9501.1, NASA Contractor Financial Management Reporting System.
- c. NPR 1441.1, NASA Records Retention Schedules.
- d. NPR 4200.1, NASA Equipment Management Procedural Requirements.
- e. NPR 5800.1, Grant and Cooperative Agreement Handbook (14 CFR 1260).
- f. NPR 7120.5, NASA Space Flight Program and Project Management Requirements.
- g. NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements.
- h. NPR 7120.8, NASA Research and Technology Program and Project Management Requirements.
- i. NPR 8800.15, Real Estate Management Program.
- j. NPR 9010.2, Financial Management Operating Procedures and the Continuous Monitoring Program.
- k. NPR 9060.1, Cost Accruals.
- l. NPR 9090.1, Reimbursable Agreements.
- m. NPR 9260.1, Revenue, Unfunded Liabilities and Other Liabilities.
- n. NPR 9501.2, NASA Contractor Financial Management Reporting.

P.5. Measurement/Verification

Quality control reviews and analysis of financial and budgetary reports and data submitted through

the continuous monitoring program shall be used to measure compliance with this NPR.

P.6. Cancellation

NPR 9250.1, Property, Plant, and Equipment and Operating Materials and Supplies, dated September 30, 2008.

/s/

Terry Bowie
NASA Deputy Chief Financial Officer

Chapter 1. Overview of Capitalized Property, Plant, and Equipment

1.1 Overview

1.1.1 The National Aeronautics and Space Administration's programs and projects are substantially research and development (R&D) initiatives that use Property, Plant, and Equipment (PP&E) to support NASA's missions, goals, and objectives.

1.1.2 The identification, valuation, recognition, and reporting of PP&E are an integral part of NASA's ability to generate accurate and reliable financial statements and management reporting while ensuring compliance with accounting standards and Federal financial reporting requirements. This NPR prescribes the accounting standards and policy for recognizing and reporting PP&E and OM&S, including the application of NASA's capitalization criteria. NASA utilizes the Asset Accounting module within SAP, the Agency's enterprise resource management system, to financially account for and report capitalized PP&E.

1.2 Categories of PP&E

1.2.1 PP&E is defined as tangible assets that (1) have an estimated useful life of two or more years, (2) are not intended for sale in the ordinary course of business, and (3) are intended to be used or available for use by the entity.

1.2.2 Two categories of PP&E have been defined for accounting and reporting purposes.

a. General PP&E. General PP&E consists of tangible assets that meet NASA's capitalization criteria. General PP&E includes the following categories:

(1) Real Property. Land, land rights, buildings, other structures and facilities, construction in process, and capital improvements/modifications.

(2) Personal Property. General equipment, Work-in-Process (WIP), capital improvements/modifications, and theme assets.

(3) Capital Leases. Leases and leasehold improvements.

(4) Internal Use Software.

b. Stewardship PP&E. Stewardship PP&E consists of tangible items of PP&E that are not capitalized because their value may be indeterminable or it is meaningless to capitalize them due to its unique nature. Stewardship PP&E includes the following categories:

(1) Heritage Assets. Heritage Assets are PP&E of historical, natural, cultural, educational significance, artistic importance, or significant architectural characteristics. Heritage Assets are not capitalized.

(2) Stewardship Land. Stewardship Land is land and land rights other than that acquired for or in connection with General PP&E, land acquired via the public domain, or land acquired at no cost. Stewardship land is not capitalized.

1.3 Capitalization of PP&E

1.3.1 Capitalization Criteria. The following capitalization criteria apply to general PP&E, including acquisitions, fabrications, modifications, and improvements. NASA shall capitalize individual items of PP&E acquired by construction, purchase, transfer, donation, or exchange, which meet all of the following criteria:

- a. Have an acquisition cost of \$100,000 or more (except internal use software which has a capitalization threshold of \$1,000,000).
- b. Have an estimated useful life of two years or more (except internal use software with a useful life of five years).
- c. Are not intended for sale in the ordinary course of operations.
- d. Have been acquired or constructed with the intention of being used, or being available for use, by the Agency.
- e. Have a current or planned alternative future use on another project with a separate objective. Institutional acquisitions that are not defined as maintenance are presumed to have an alternative future use.

1.3.2 Items not classified as General PP&E on NASA's financial statements:

- a. Items that the Agency has a reversionary interest. For example, the Agency sometimes retains an interest in PP&E acquired with grant money in the event that the recipient no longer uses the PP&E in the activity for which the grant was originally provided and the PP&E reverts to the Agency.
- b. Items classified as Heritage Assets or Stewardship Land.
- c. Items that should be expensed as R&D costs.
- d. Items classified as Other Assets. Property surplus to the needs of the Agency are removed from capital accounts, and no additional depreciation is taken as assets await final disposition.

1.3.3 Items not meeting the above capitalization criteria or those specifically identified as prototypes, test articles, and Special Tooling (ST) and Special Test Equipment (STE) are considered R&D as defined by Accounting Standards Codification (ASC) 730, Research and Development, and FASAB Technical Release 7, which provide the standards for accounting for R&D costs versus capital costs. ASC 730 states that the costs of materials and equipment or facilities that are acquired or constructed for R&D activities and that have an alternative future use shall be capitalized as tangible assets when acquired or constructed. However, the costs of materials, equipment, or facilities that are acquired or constructed for a particular research and development project that have no current or planned alternative future use and, therefore, provide no separate economic values are defined as R&D costs.

1.3.4 Items identified as R&D shall be expensed at the time the costs are incurred during acquisition, fabrication, or construction.

1.3.5 Identification of Items with an AFUQ, NASA Form 1739.

1.3.5.1 NASA's programs and projects are primarily R&D. However, some PP&E may be used to support other current or future projects (e.g. the assets could be used to support other/multiple projects and programs currently or in the future). Identification of these items and their capitalization determination will be accomplished through the AFUQ, NASA Form 1739.

1.3.5.2 AFUQ, NASA Form 1739 shall be completed for all identified PP&E acquisitions, fabrications, or improvements that meet the \$100,000 threshold, including pieces that will be assembled into an end item that will be \$100,000 or more. The NASA Form 1739 will identify each acquisition/project as capital or non-capital in accordance with the capitalization criteria outlined above.

1.3.6 Identification and Tracking of Capital PP&E.

1.3.6.1 Assets identified as capital on the AFUQ, NASA Form 1739 shall be segregated for identification and tracking through the establishment of unique WBS elements with capital asset indicators. This will allow for the separate identification, funding, and accumulation of capital costs associated with the capital acquisition, fabrication, or modification within NASA's official accounting system.

1.3.6.2 Joint costs that are commonly used to support the production of multiple assets within a single project that cannot be directly traced to each final asset shall be directly traced to the project via the establishment of unique WBS element(s) with a capital asset indicator(s) at the project level. Joint or common project costs, as well as other indirect costs that cannot be directly traced to the project or capital asset in an economically feasible manner, will be allocated to the final asset(s) based on a reasonably supportable allocation methodology. For example, inspection or survey costs that cannot be traced to a specific end item may be allocated to the final asset based upon percentage of total inspections or surveys, square footage, or project size.

1.3.6.3 Assets or projects identified as capital, but where a unique WBS was not previously established, shall be capitalized only with the prior approval of the Agency Director of Financial Management and supporting documentation as required in Section 2.7.

1.4 PP&E Life Cycle

1.4.1 Purpose. This section describes the PP&E life cycle from a financial accounting perspective. The descriptions in the following paragraphs provide a summary of the major PP&E life cycles and financial requirements for capital PP&E identification, cost accumulation, reporting, receiving, and disposal.

1.4.2 PP&E Life Cycle Phases. The following sections describe the major phases of the PP&E life cycle:

1.4.2.1 Planning. Identifying planned acquisitions, fabrications, or modifications of NASA-owned PP&E shall be evaluated through the completion of the AFUQ, NASA Form 1739 by the program/project manager and the Center Office of the Chief Financial Officer (OCFO) representative to determine if the PP&E meets NASA's capitalization criteria. Those PP&E items that meet established capitalization criteria will be capitalized as General PP&E and segregated for identification and tracking through the establishment of unique WBS elements with capital asset indicators.

1.4.2.1.1 The unique WBS element(s) shall be established with a capital asset indicator in NASA's Metadata Manager (MdM). The five asset indicator attributes in MdM, which are based on the type of acquisition and information provided on the AFUQ, NASA Form 1739, are:

- a. Fabricated equipment.
- b. Purchased equipment.
- c. Real property.

d. Software (Internal use software \$1M and over).

e. Theme assets.

1.4.2.2 Acquisition, Fabrication, or Modification. Acquisition, fabrication, or modifications of General PP&E may occur through a variety of methods. These may include simplified acquisitions, vendor acquisitions, fabrication, construction, and/or modifications. General PP&E may also be transferred between contractors and NASA, donated, transferred from other Federal Agencies, or acquired through Capital Lease.

1.4.2.2.1 Costs incurred by NASA or its contractors for an asset meeting the capitalization criteria shall be identified and tracked using a separate unique WBS element with a capital asset indicator.

1.4.2.2.2 Identified capital costs shall be accumulated against the unique WBS element as an Asset Under Construction (AUC) and recorded as WIP. These capital costs will be transferred from WIP at the time of delivery or completion and settled against a final asset or sub-asset(s) as General PP&E in the general ledger.

1.4.2.3 Disposition. General PP&E identified as excess (permanently not in use) to the needs of NASA and/or identified as no longer in operation shall be removed from the General PP&E general ledger accounts and recognized as Other Assets in accordance with SFFAS No. 6 until the asset is sold, scrapped, excessed, or decommissioned.

1.5 Reconciliation and Reporting

1.5.1 Reconciliations and validations shall be performed, documented, and reviewed in accordance with the Continuous Monitoring Program (CMP) requirements per NPR 9010.2, Financial Management Operating Procedures and Continuous Monitoring Program.

1.5.2 CMP activities and supporting work papers shall be maintained by the Center Chief Financial Officer (CFO)/Deputy Chief Financial Officer (Finance) (DCFO)(F) and will be available for review upon request or as required in the CMP.

1.6 Roles and Responsibilities

1.6.1 The Center Program/Project Manager shall:

a. Inform the Agency OCFO Property Branch of acquisition strategy meetings.

b. Submit to the Center OCFO the completed AFUQ, NASA Form 1739 when a potential capital acquisition, fabrication, or modification has been identified per the requirements set forth in NPR 7120.5, NASA Space Flight Program and Project Management Requirements, NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements, NPR 7120.8, NASA Research and Technology Program and Project Management Requirements, and NPR 8800.15, Real Estate Management Program.

c. Ensure a unique WBS element is created within the project WBS structure for assets meeting the capitalization criteria as identified through the use of AFUQ, NASA Form 1739.

d. After Center CFO approval, Ensure that the completed and approved AFUQ, NASA Form 1739 is attached to the Mdm request using the attachment feature in Mdm.

e. Create Purchase Requisitions (PRs) to fund the acquisition, fabrication, or modification of

identified PP&E meeting the capitalization criteria ensuring that the PRs are funded by the unique WBS element with a capital asset indicator.

1.6.2 The Agency OCFO shall:

- a. Review and approve the MdM requests for unique WBS elements with a capital asset indicator for assets identified as meeting the capitalization criteria through the review of the attached AFUQ, NASA Form 1739.
- b. Develop, in conjunction with procurement, project management personnel, and Center finance personnel, the financial policies and procedures and standard financial management reporting requirements to be included in solicitations and contracts to support separate cost reporting of each identified capital asset.

1.6.3 The Center OCFO shall:

- a. Ensure that adequate financial controls are in place and financial records and reports accurately reflect the status and value of capital PP&E.
- b. Ensure that adequate supporting documentation is maintained and is readily available to support audit requests and other quality control reviews. (See Section 2.7 of this NPR.)
- c. Ensure that the CMP activities are completed in accordance with NPR 9010.2, Financial Management Operating Procedures and Monitoring Program.
- d. Work with project managers, procurement officers, resource managers, real property officers, and logistics personnel to review project work that will procure, fabricate, construct, or improve capital assets to ensure all General PP&E is properly identified and unique WBS elements are created so that the assets can be accurately valued and reported.
- e. Review and approve all submitted AFUQ, NASA Form 1739 for PP&E acquired or fabricated beginning October 1, 2007, to ensure that all identified, planned PP&E comply with AFUQ and NASA capitalization requirements and that unique WBS elements have been identified for PP&E that meet capitalization requirements.
- f. Provide the final capitalization determination for all identified PP&E based upon review and approval of the AFUQ, NASA Form 1739.
- g. Maintain the original completed and approved AFUQ, NASA Form 1739.
- h. Ensure that each identified asset meeting the capitalization criteria has a unique WBS and that the correct capital asset indicator attribute has been assigned to the MdM record.
- i. Work in close liaison with Agency OCFO, procurement, and project management personnel to develop the financial management reporting requirements and instructions to be included in solicitations and contracts that support the separate reporting of each item of General PP&E.
- j. Review identified capital assets recorded as AUCs and ensure that the AUCs are settled to a final asset or sub-asset(s) upon delivery or completion and the value of the final asset or sub-asset(s) is properly supported.
- k. Review contractor requests to purchase PP&E in order to ensure that a unique WBS element(s) and separate reporting of individual PP&E has been established.
- l. Identify costs to be capitalized and maintain financial records for each capital facility project in progress. These records are the source for entries to the general ledger WIP.

1.6.4 Center Procurement Officers shall support the Center OCFO in identifying and reporting identified capital PP&E through implementation of the Federal Acquisition Regulation (FAR), 48 C.F.R. ch. 1 and the NASA FAR Supplement (NFS), 48 C.F.R. pts. 1801-1854 in the following areas:

a. Prior to Contract Award.

(1) Ensure that the types and approximate quantities of Government furnished property and contractor acquired property are identified in solicitations and are discussed in procurement plans and procurement strategy meetings, whereby Center OCFO representatives are included in the procurement planning process (Acquisition Planning, 48 C.F.R. pt. 7 and NFS, Acquisition Planning, 48 C.F.R. pt. 1807) where applicable.

(2) Ensure that NASA technical, program control, procurement, financial, and resource personnel have taken part in developing the reporting structures as defined in NPD 9501.1 for solicitations that include the acquisition, fabrication, or construction of Government property.

(3) Ensure that the appropriate solicitation instructions, provisions, and contract clauses are included in solicitations and contracts, in order that (per FAR Government Property, 48 C.F.R. pt. 45 and NFS Government Property, 48 C.F.R. pt. 1845):

(a) The solicitation identifies all Government property that may be made available for performance of the contract.

(b) Contractors are required to identify any Government property desired and required for performance of the effort.

(c) The resulting contract includes a listing of all Government property supplied for use under the contract.

(d) Contractors are required to obtain approval for the purchase or fabrication of property for which the Government will have title, unless the property is a deliverable itemized under the contract or a component of or material for that deliverable.

(e) Support the cognizant financial management and project management personnel in the development of contractor cost reporting requirements (where cost reporting is required) that include a separate reporting category for each identified capital asset (NFS, NASA Contractor Financial Management Reporting, 48 C.F.R. subpt. 1842.72 and NPR 9501.2, NASA Contractor Financial Management Reporting).

(4) For contracts that do not require cost reporting, as defined in NPD 9501.1, NASA Contractor Financial Management Reporting System, create a separate contract line item or unique task/delivery order for each capital asset for which the Government will have title.

(5) Require that invoices/vouchers or other supplemental cost reports or task orders/delivery orders are submitted by contract line item, clearly identifying each item of PP&E.

b. After Contract Award.

(1) Review for approval all contractor requests to purchase and/or fabricate PP&E which the Government will have title to in accordance with the FAR Government property clause, and forward approved requests with an expected acquisition cost equal to or greater than \$100,000 to the Center DCFO in accordance with NFS Government Property, 48 C.F.R. pt. 1845.

(2) For contracts requiring financial management and cost reporting, ensure that contractors report approved PP&E purchases and/or fabrications that have been determined to meet the capitalization

criteria as separate line items (as initially established in the contract).

(3) For firm fixed price contracts, ensure that the invoice, and/or progress payment requests, or other interim payment requests contain the contract line item level detail to allow proper costing of each item of PP&E.

1.6.5 The Center Real Property Accountable Officer shall:

- a. In consultation with the Center Facility Utilization Officer or Facility Utilization Board, notify the Center CFO/Center DCFO(F) when there is a change in the status of real property for which the Center is accountable (including contractor-held real property), including new construction, capital improvements, or changes in operational status such as standby, mothballed, or abandoned.
- b. Assist the Center CFO/DCFO(F) as requested, with the reconciliation of real property reports to the accounting system.

Chapter 2. PP&E Policies for Valuation and Recognition

2.1 Overview

2.1.1 This chapter sets forth general principles, standards, and policies to assure compliance with statutory and regulatory requirements regarding the valuation and recognition of NASA's General PP&E. These requirements ensure effective financial control over NASA-owned PP&E. Chapter 7 of this NPR establishes the general principles, standards, and policies for NASA's Heritage Assets.

2.2 Capitalization Criteria

2.2.1 The following capitalization criteria apply to PP&E, including acquisitions, fabrications, modifications, and improvements. NASA shall capitalize individual items of PP&E acquired by construction, purchase, transfer, donation, or exchange which meet all of the following criteria:

- a. Have an acquisition cost of \$100,000 or more (except internal use software which has a capitalization threshold of \$1,000,000).
- b. Have an estimated useful life of two years or more (except internal use software with a useful life of five years).
- c. Are not intended for sale in the ordinary course of operations.
- d. Have been acquired or constructed with the intention of being used, or being available for use, by the Agency.
- e. Have a current or planned alternative future use on another project with a separate objective. Institutional acquisitions that are not defined as maintenance are presumed to have an alternative future use.

2.2.2 Items not meeting the above criteria or those specifically identified as prototypes or test articles, including ST and STE, are considered R&D costs and are expensed in the period incurred.

2.2.3 Bulk Purchase. PP&E items acquired as part of a bulk purchase that individually meet the capitalization criteria shall be capitalized in accordance with the policies established in this NPR. If the cost per item purchased in bulk does not meet the capitalization threshold, the bulk purchase will be expensed in the period acquired. For bulk purchase of internal use software, refer to Chapter 5 of this NPR.

2.2.4 Collateral Equipment.

2.2.4.1 Collateral equipment includes building-type equipment, built-in equipment, and large substantially affixed equipment normally installed as a part of a facility project such as, construction or modification. Such a project is considered a single event for the purposes of determining whether the PP&E meets the capitalization criteria.

2.2.4.2 Collateral equipment is not severable and is considered part of the facility project through which it is installed. Therefore, the cost of collateral equipment shall be included in the value of the project in making the determination as to whether the project meets the capitalization criteria specified above. If the project meets the capitalization criteria, the value of the collateral equipment

will be included in the capitalized value.

2.2.4.3 The replacement cost of collateral equipment or the addition of collateral equipment to an existing facility shall be treated as either a capital improvement or maintenance, depending on the circumstances.

2.2.4.4 Non-collateral equipment, when acquired and used in a facility or test apparatus, can be severed and removed after construction without substantial loss of value or damage to the equipment or the premises where it is installed.

2.2.4.5 Each non-collateral equipment shall be considered separately in relation to the capitalization criteria, and non-collateral equipment which meets the capitalization criteria will be recorded in the general ledger PP&E accounts.

2.2.5 Modifications.

2.2.5.1 Modifications to existing PP&E shall be capitalized and defined as capital improvements if the modification meets certain criteria.

2.2.5.2 NASA shall capitalize individual modifications as capital improvements which have a cost of \$100,000 or more, and meet one of the following criteria:

- a. Extend the useful life of the asset by two years or more.
- b. Enlarge or improve its capacity.
- c. Otherwise upgrade it to serve needs different from, or significantly greater than, those originally intended.

2.2.5.3 Facility modifications shall be:

- a. Identified on the AFUQ, NASA Form 1739.
- b. Assigned a unique WBS element(s) with the appropriate capital asset indicator(s) if it meets the capitalization criteria as a capital improvement. Capital improvements are capitalized and depreciated. Modifications that do not meet the capitalization criteria are expensed.

2.2.5.4 In situations where the acquisition of PP&E or modifications to existing PP&E are linked to an end item, the cost of such individual acquisitions or modifications shall be included in the cost of the end item. In these situations, the combined cost of the individual items that make up the end item is to be used in determining if the item meets the capitalization criteria.

2.2.5.5 Where a replacement occurs due to a capital improvement, the accounts shall be appropriately adjusted to remove the values of items replaced (where those original values are \$100,000 or more). If only a portion of the property is being replaced and that portion is not separately identifiable in the accounting records, the value of the replaced portion will be estimated and the accounts adjusted accordingly.

2.2.5.6 Removal of an item's recorded cost shall be treated as a separate accounting transaction from the recording of additions or replacements.

2.2.5.7 Replacements due to maintenance shall be expensed.

2.2.5.8 If an item's individual acquisition value is below \$100,000 when it is first acquired and it is not, therefore, originally capitalized, it shall not be capitalized later regardless of whether the value of all subsequent modifications results in a cumulative value of \$100,000 or more.

2.2.5.9 If a single subsequent modification meets the capitalization criteria, that modification shall be capitalized only in accordance with the capitalization criteria. Each modification will be considered a single event.

2.2.5.10 If a reduction in the capitalized value of an asset occurs as a result of a modification and causes the value of the asset to drop below \$100,000, it shall be removed from the general ledger accounts for capitalized PP&E.

2.2.6 Maintenance. Expenses incurred to maintain an asset in a useable condition do not meet the criteria for capitalization and are thus expensed in the accounting period in which the costs were incurred. SFFAS No. 6 states the following: "For purposes of this standard, maintenance is described as the act of keeping fixed assets in acceptable condition. It includes preventive maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve the asset so that it continues to provide acceptable services and achieves its expected life. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, those originally intended."

2.2.7 Incremental Launch Service Costs.

2.2.7.1 NASA shall: Capitalize incremental launch service costs associated with delivery of International Space Station components owned by the United States.

2.2.8 Costs and Benefits Associated with Barter Agreements.

2.2.8.1 NASA shall not capitalize any costs and/or benefits associated with barter agreements.

2.3 Valuation

2.3.1 Capitalized values shall include all costs incurred to bring PP&E to a form and location suitable for its intended use, (i.e., the total cost to NASA). For example, the cost may include the following, as appropriate for the type of PP&E capitalized:

- a. Labor and other direct or indirect production costs.
- b. Amounts paid to vendors or contractors, including fees.
- c. Transportation charges to the point of initial use.
- d. Handling and storage charges (for assets produced or constructed).
- e. Engineering, architectural, and other outside services for designs, plans, specifications, and surveys.
- f. Acquisition and preparation costs of buildings and other facilities.
- g. An appropriate share of the cost of the equipment and facilities used in construction work.
- h. Fixed equipment and related installation costs required for activities in a building or facility.
- i. Direct costs of inspection, supervision, and administration of construction contracts and construction work.
- j. Legal and recording fees and damage claims.
- k. Fair values of facilities and equipment donated to the Government.

1. Material amounts of interest costs paid.

2.3.2 Costs of extended warranties shall be expensed at the time of payment and not be included in the capitalized value.

2.3.3 Where capitalized equipment is traded in for another piece of capitalized equipment, the capitalized value of the new asset shall be the acquisition cost, including the amount received for the trade-in.

2.3.4 NASA's General PP&E assets are presumed to have no residual/salvage value. As a result, residual/salvage value is set at zero when determining Net Realizable Value.

2.3.5 Transfers and Donations.

2.3.5.1 When PP&E is transferred from one NASA Center to another, the receiving Center shall record both the capitalized amount and accumulated depreciation previously reported by the sending Center.

2.3.5.2 Transfers of assets from other Government agencies with reimbursement that meet the capitalization criteria shall be recorded at the amount NASA is reimbursing the other Government agency. The manufacturer or original acquisition date provided by the other Government agency will be used as the PP&E's acquisition date.

2.3.5.3 Transfers of assets from other Government agencies without reimbursement that meet the capitalization criteria shall be recorded based on the net book value recorded by the transferring agency. If the value cannot be obtained, the item will be recorded at its fair market value at the time of the transfer, provided it meets the capitalization criteria. The manufactured date or original acquisition date provided by the other Government agency is to be used as the PP&E's acquisition date.

2.3.5.4 Donations of PP&E shall be valued at the estimated fair market value at the time of acquisition, provided it meets the capitalization criteria. If the estimated fair market value cannot be determined, other reasonable methods to identify the estimated value of the asset may be used.

2.3.5.5 In some cases, new PP&E or improvements to existing NASA PP&E are needed in order to perform the work required under a reimbursable agreement. The customer may request that NASA acquire the PP&E or make the capital improvements and include the cost in the total price of the reimbursable agreement. When NASA incurs the cost to acquire such PP&E or capital improvement, the cost is recorded as an expense and becomes part of the cost billed to the reimbursable customer. If, at the end of the reimbursable agreement, the Center CFO, in consultation with the Center Office of Chief Counsel, determines that NASA may appropriately retain such PP&E or capital improvement, the transaction to record the PP&E or capital improvement as a NASA asset is a separate transaction that has no effect on the amounts previously recorded for the reimbursable agreement. The asset(s) is to be recorded as follows:

a. If the reimbursable customer is a Federal agency, the improvement(s) or asset(s) will be valued at the depreciated value at the end of the reimbursable agreement. The transaction will be treated as a transfer, and the offset to the applicable asset account will be USSGL Account 5720, Financing Sources Transferred In Without Reimbursement.

b. If the reimbursable customer is a non-Federal entity, the asset(s) will be valued at the cost NASA paid to acquire it and bring it to a form and location suitable for its intended use under the reimbursable agreement. The transaction will be treated as an unconditional donation, and the offset to the appropriate asset account will be USSGL Account 5610, Donated Revenue - Nonfinancial Resources. (Accounting treatment as "donated" does not provide separate authority to accept such

assets, which instead must be determined on a case-by-case basis.)

2.3.5.6 Borrowed or Loaned PP&E. PP&E loaned-in, including in-grants, from non-NASA organizations is not recorded in NASA's financial records. However, PP&E borrowed from another NASA Center shall be treated in accordance with the supporting documentation.

2.3.6 Found on Station.

2.3.6.1 Items found on station or items identified during inspections or inventories where original supporting documentation is not available shall be recorded as Found on Station and valued at their estimated value based on similar items, catalogs, or other reasonable estimates.

2.3.7 Work-in-Process (WIP).

2.3.7.1 NASA shall classify PP&E under construction (i.e., not complete) that meet the capitalization criteria as WIP. Direct and indirect capital costs related to the acquisitions, fabrications, and improvements incurred to bring the capital PP&E to a form and location suitable for its intended use will be accumulated in the WIP account.

2.3.7.2 PP&E meeting the capitalization criteria shall be segregated for tracking by unique WBS elements with capital asset indicators. The costs accrued against the unique WBS element(s) will be recorded as WIP. Costs are accrued based on the structure of the acquisition or contract and include a variety of costing methodologies in accordance with NPR 9060.1, Cost Accruals, and NPR 9501.2, NASA Contractor Financial Management Reporting.

2.3.7.3 When PP&E being recorded in WIP is complete, beneficially occupied, or received, delivered, and accepted, the total capital cost recorded as WIP shall be transferred to capital PP&E. Individual components or parts of the PP&E that are complete will remain in WIP until the entire PP&E is ready to be transferred from the WIP account to an asset. The capital balances transferred from WIP must be supported by sufficient supporting documentation, and any variances between the amount transferred and the supporting documentation must be reviewed and approved by the Agency Director of Financial Management prior to processing any manual adjustments.

2.4 NASA Property in the Custody of Others

2.4.1 NASA-owned contractor-held PP&E may be NASA-furnished as Government Furnished property, or acquired, fabricated, or modified by the contractor.

a. Contractors are contractually required to report all NASA-owned PP&E on an annual basis utilizing the NASA Form 1018, NASA Property in the Custody of Contractors (NF1018). In addition, contractors with \$10 million or more in NASA-owned PP&E are required to report on a monthly basis through NASA's Contractor Held Asset Tracking System (CHATS) as contractually required. Contractors shall report the accumulated cost of identified capital PP&E as a separate line item on their cost reports in accordance with NPD 9501.1, NASA Contractor Financial Management Reporting System for all contracts awarded after October 1, 2007, that contain applicable contract clauses.

2.4.2 NASA-owned PP&E under grants and cooperative agreements provide out-grants of General PP&E in which NASA does not transfer the title of the property to the grantee. The grantee obtains the rights to use the PP&E during the period of the grant in accordance with the terms of the agreement. NASA will continue to own the General PP&E during the term of the grant and continue to account for the General PP&E in NASA's accounting system. For more details about the out-grant of NASA-owned real property, please refer to NASA NPR 5800.1, NASA Grant and Cooperative Agreement Handbook.

2.4.3 NASA-owned PP&E leased to non-NASA customers does not transfer title of the property to the lessee; the lessee obtains the rights to use the PP&E in accordance with the lease agreement. NASA will continue to own the PP&E during the term of the lease and continue to recognize and depreciate the PP&E in NASA's accounting system. For more details about Host-Tenant agreements between NASA and another organization that provide for the use of NASA facilities, institutional services, or for support services to the non-NASA customer Enhanced Use Lease Agreements (EUL), and policy on billing and collections under reimbursable agreements, please refer to NPR 9090.1, Reimbursable Agreements.

2.4.4 NASA-owned PP&E loaned to other Federal agencies remains NASA property. NASA will continue to own the PP&E during the term of the loan and continue to recognize and depreciate the PP&E in NASA's accounting system.

2.5 Recognition

2.5.1 Receipt of General PP&E.

2.5.1.1 In general, NASA shall recognize general PP&E when title to the asset passes to NASA. Title passage will occur either at the time of delivery and acceptance by a Government official or at an earlier contractually specified time.

2.5.1.2 In the case of fabricated or constructed PP&E, the PP&E shall be recorded as WIP until placed in service, or when beneficial occupancy occurs, at which time, the balance will be transferred to capital PP&E.

2.5.1.3 Capitalization of WIP shall not be delayed pending final acceptance of residual closeout work, such as punch lists.

2.5.1.4 For purchased equipment, the recognition date shall be based on the shipping terms of the contract or purchase order. This will be the date shown on the receiving and inspection report or equivalent source document evidencing the receipt, passage of inspection, and acceptance by the Government unless the contract or purchase order provides other specific terms of title passage, such as after vendor installation and testing.

2.5.1.5 For construction or capital improvements of real property, capitalization shall begin on the date the PP&E are placed in service. This event is defined as the date on which the facility or improvement to a facility is available for use by NASA. The date the facility is accepted for use is known as the beneficial occupancy date.

2.5.1.6 For General PP&E assets acquired by a contractor on behalf of NASA, the recognition date shall be based upon delivery or constructive delivery either to the contractor performing the service or to a NASA facility. Delivery or constructive delivery must be based on the terms of the contract regarding delivery, receipt, and acceptance.

2.5.2 Disposal of General PP&E.

2.5.2.1 General.

2.5.2.1.1 Disposals of NASA PP&E may occur due to several reasons. The various methods of disposition will be executed in accordance with the applicable Federal regulations, and NASA policy and shall be accounted for according to the Federal accounting standards.

2.5.2.1.2 Excess PP&E. When the Agency determines that the General PP&E is no longer required for NASA's needs and decides to permanently remove, retire, or dispose of the asset, the asset shall

be treated as excess property.

2.5.2.1.3 At the time the General PP&E is identified as excess, it shall be reclassified from General PP&E accounts to other appropriate asset accounts (Other Assets), along with associated accumulated depreciation, and recorded in an appropriate asset account at its expected net realizable value. NASA PP&E is presumed to have no residual/salvage value. However, no additional depreciation/amortization will be taken once such assets are removed from General PP&E in anticipation of disposal, retirement, or removal from service. General PP&E could also be deemed no longer in service when it has suffered damage or becomes obsolete and could be reclassified to other appropriate asset accounts (Other Assets) similar to excess PP&E.

2.5.2.2 Donation. Excess PP&E determined to be surplus to the needs of NASA are available for donation to other entities. NASA shall use the General Services Administration (GSA) and/or other approved transfer process and documents to accomplish the donation to other entities. General PP&E will be removed from NASA's books, along with the accumulated depreciation at the time the item is identified as excess, and will be recorded in the Other Assets account. Once the excess property is donated, the property will be removed from the Other Assets account and any loss incurred at the time of transfer will be recognized.

2.5.2.3 Sale of Surplus PP&E. Excess PP&E determined to be surplus to the needs of NASA and available for sale to the public are identified as surplus PP&E available for sale. At the time of the sale of the surplus PP&E, the transaction is recorded by removing the asset from the Other Asset account and recognizing any gains or losses on the disposition of the PP&E.

2.5.2.4 NASA-owned PP&E in the custody of contractors determined to be surplus to the needs of NASA and other Governmental agencies shall be disposed of in accordance with the provision of the FAR and NFS.

2.5.2.5 Abandonment. Abandonment is the method of disposition of PP&E with no commercial value as determined by an authorized NASA official. The timing of the abandonment (after or before the determination was made that the PP&E is excess) will determine when the disposal of the asset is recognized. If the capital PP&E is abandoned after it is being excessed, it shall be removed from the Other Assets account, and any loss on disposition of asset will be recognized. If the abandonment occurs prior to the PP&E being excessed, the abandoned PP&E will be removed from NASA's books, along with associated accumulated depreciation, and any loss on disposition will be recognized.

2.5.2.6 General PP&E assets that have been identified for permanent removal from service shall no longer be depreciated/amortized once it has been determined that the asset no longer contributes to the operations of NASA. The triggering event for disposal is the date the asset no longer provides service to the operations of NASA. The disposal date will represent the date on which the General PP&E asset, and its accumulated depreciation/amortization are no longer reported under the General PP&E account on the financial statements.

2.5.2.7 The disposal start date is defined as the calendar date of a legally enforceable and recognizable obligation to complete the disposal action or the date the operation has ceased, whichever comes later. On this date, the PP&E's net book value is removed from the financial records and the corresponding gain/loss from disposition is recorded. For demolitions, this represents the demolition contract's start date. For transfers and sales, this represents the date on which the instrument is endorsed or operation is ceased, whichever comes later. For natural disasters, this represents the actual date of the incident.

2.5.3 PP&E Temporarily Not In Use. When General PP&E is temporarily removed from service or use due to its current inactive status with the expectation that the asset eventually will be returned to

service or use, the PP&E's value shall not be removed from General PP&E accounts. It will remain in the General PP&E accounts and continue to be depreciated during the period of non-use. Standby status and mothballed status are two classifications of temporary inactivity; therefore, assets placed in either of these classifications will not be removed from the General PP&E account and will continue to be depreciated during the period of non-use.

2.6 Depreciation

2.6.1 General. NASA General PP&E assets are those assets that have a recorded cost that meet NASA capitalization criteria--often called "capital assets" or "fixed assets." NASA PP&E will be capitalized and, with the exception of land and land rights of unlimited duration, will be depreciated/amortized. Such capitalized amounts, as well as associated amounts of accumulated depreciation and depreciation expense, will be reflected in NASA financial statements.

2.6.2 Method of Depreciation. NASA policy is that the straight-line method of depreciation be used for all assets.

2.6.3 Depreciable Basis. NASA's PP&E is presumed to have no residual/salvage value and, therefore, residual/salvage value does not affect the depreciable basis in determining depreciation. Land is not subject to depreciation. Land rights that are for a specified period of time shall be amortized over the specified time period. When land and a building are purchased together, the depreciable basis for the building is the total purchase cost less the actual cost or estimated value of the land.

2.6.4 Commencement of Depreciation. The event that triggers the calculation of depreciation is the date of receipt shown on the asset receiving document or the date the asset is installed and placed in service (regardless of whether it is actually used). For real property assets, depreciation shall commence when the facility is capitalized and placed in service, regardless of whether the facility is fully occupied or in use.

2.6.5 Excess of Useful Life. If an asset remains in use longer than its estimated useful life, it shall be retained in the property accountability or management system, as well as the accounting records. The accounting records will reflect both its recorded cost and accumulated depreciation until disposition of the asset.

2.6.6 Changes to Useful Life. Factors such as financial and operational conditions, physical wear and tear, or technological changes can affect the useful life of specific PP&E items. Changes in estimated useful life shall be treated prospectively and accounted for in the period of the change and future periods. No adjustments will be made to previously recorded depreciation or amortization.

2.6.7 Calculation of Depreciation. Depreciation expenses shall be calculated based on the recorded capitalized cost and divided equally among accounting periods during the asset's remaining useful life based on recovery periods in Table 2-1 of this chapter.

2.6.8 Recovery Periods. Table 2-1 (below) prescribes the recovery periods (useful lives) that shall be used for depreciable General PP&E assets.

Table 2-1, NASA Recovery Periods for Depreciable General PP&E Assets

NASA RECOVERY PERIODS FOR DEPRECIABLE GENERAL PP&E ASSETS (Excludes Heritage Assets)	
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Description of General PP&E Assets	Recovery Period	
	Initial Acquisition	Modification/Improvement
Agency-Peculiar Equipment	15 Years	
Other Equipment	5 to 20 Years depending on its nature.	
Buildings, Hangers, Warehouses, Fuel Storage Buildings, Air Traffic Control Towers, and Other Real Property Buildings	40 Years	20 Years
Other Structures and Facilities	15 Years	5 Years
Improvements to Leased Buildings and Other Real Property (Leasehold Improvements)	Remainder of Lease Period or 20 Years, whichever is less.	Remainder of Lease Period or 20 Years, whichever is less.
Land Rights of Limited Duration	Over the Specified Duration	
Internal Use Software	5 Years	
Shuttle Assets	Useful life will be based on fully depreciating these assets by September 30, 2010, at the expected end of the life of the Shuttle Program.	

2.7 Documentation

2.7.1 Supporting Documentation. When recording the acquisition/construction cost of NASA Capital PP&E, the dollar value assigned to the asset shall be supported by appropriate documentation. Entries to record financial transactions in general ledger accounts and/or supporting subsidiary property accountability records must be supported by adequate source documents that reflect transactions affecting NASA's investment in the PP&E. Center CFO offices are responsible for ensuring that supporting documentation exists for capital assets and shall maintain records for each capital asset. New acquisitions, fabrications, or capital improvements will be supported by adequate documentation of the valuation, ownership, and capitalization determinations.

2.7.1.1 Valuation. Prior to recording the acquisition/construction cost of NASA Capital PP&E, the dollar value to be assigned to the asset must be supported by appropriate documentation. PP&E acquired from external sources, such as vendors, must be supported by third-party invoices and/or cost reports. PP&E constructed or fabricated internally shall be supported by civil servant labor reports and/or material reports.

2.7.1.2 Ownership. Prior to recognizing new acquisitions/construction as NASA Capital PP&E, supporting documentation, such as receiving reports, must be gathered to verify NASA's rights of

ownership to the assets.

2.7.1.3 Capitalization Determination. A completed AFUQ, NASA Form 1739 must be maintained for all new Capital PP&E that clearly documents the decision to capitalize the asset.

2.8 Financial Records Retention

2.8.1 NASA Centers, Component Facilities, and Headquarters offices shall maintain capital asset documentation in accordance with the requirements of NPR 1441.1, NASA Records Retention Schedules.

2.9 Environmental Liabilities Related to PP&E

2.9.1 For environmental/cleanup costs liability associated with removing, containing, and/or disposing of PP&E in accordance with SFFAS 6, refer to NPR 9260.1, Revenue, Unfunded Liabilities and Other Liabilities.

Chapter 3. Real Property

3.1 Overview

3.1.1 This chapter sets forth the accounting standards and policies related to NASA's real property to assure compliance with statutory and regulatory requirements. These requirements ensure financial control over NASA-owned real property, including both NASA-held and contractor-held.

3.1.2 This chapter applies to all NASA-owned and NASA-owned, contractor-held real property. Contractor-held real property is NASA-owned property in the possession of a contractor.

3.2 Roles and Responsibilities

3.2.1 Refer to Section 1.6 of this NPR document.

3.3 Capitalization Criteria and Identification

3.3.1 Real property PP&E consists of buildings, facilities, and other infrastructure that are defined as institutional and are presumed to have an alternative future use. Institutional acquisitions are property used in normal operations not specific to a program or mission. Therefore, NASA shall capitalize new construction or acquisition of real property PP&E which meet all of the following criteria:

- a. Have a unit acquisition cost of \$100,000 or more.
- b. Have an estimated useful life of two years or more.
- c. Have been acquired or constructed with the intention of being used, or being available for use, by the Agency.

3.3.1.1 Items not meeting the above criteria shall be expensed in the period incurred.

3.3.2 Modifications to existing real property PP&E are considered single events and shall be capitalized as capital improvements when the modifications have an individual cost of \$100,000 or more and meet one of the following criteria:

- a. Extend the useful life of the asset by two years or more.
- b. Enlarge or improve its capacity.
- c. Otherwise upgrade it to serve needs different from, or significantly greater than, those originally intended.

3.3.2.1 Capital Improvements are capitalized and depreciated. Modifications that do not meet the capitalization criteria are expensed.

3.3.2.2 Costs of real property acquisitions and capital improvements meeting the capitalization criteria shall be segregated for identification and tracking through the establishment of unique WBS elements with capital asset indicators.

3.3.2.3 Maintenance costs incurred to maintain an asset in a useable condition do not meet the criteria for capitalization. Therefore, these costs are expensed when incurred.

3.4 Recognition

3.4.1 WIP (Assets Under Construction).

3.4.1.1 Costs of new construction or capital improvements of real property that meet the capitalization criteria outlined above shall be captured as WIP through the establishment of unique WBS elements with capital asset indicators until the asset is beneficially occupied or placed in service, whichever occurs first.

3.4.1.2 The status of each new construction or capital improvement real property project recorded in WIP shall be monitored on a monthly basis based on the percentage of completion. Once a project has reached 95 percent completion, information must be obtained to determine if the beneficial occupancy has been issued or the PP&E has been placed in service.

3.4.1.3 When PP&E being recorded in WIP is complete or beneficially occupied, the total capital cost recorded as WIP shall be transferred to Capital PP&E. The capital balances transferred from WIP must be supported by sufficient supporting documentation, and any variances between the amount transferred and the supporting documentation must be reviewed and approved by the Agency Director of Financial Management prior to processing any manual adjustments.

3.4.1.4 Capitalization shall begin on the date the PP&E are placed in service or beneficial occupancy date. This event is defined as the date on which the facility or improvement to a facility is available for use by NASA. The capitalization of WIP must not be delayed pending final acceptance of residual closeout work, such as punch lists.

3.4.1.5 Year End. At fiscal year end, special care shall be taken to ensure that real property PP&E meeting capitalization criteria, including beneficial occupancy, are capitalized in the amount of the costs incurred up to that time, regardless of whether or not any of those costs remain unpaid.

3.4.2 The cost of Real Property PP&E constructed by or through foreign governments or in foreign countries under NASA contracts shall be capitalized in accordance with the title rights contained in formal agreements.

3.4.3 When a party other than NASA constructs a facility that becomes NASA PP&E under the terms of a reimbursable agreement, that property shall be capitalized at the estimated fair market value of the facility, if the actual cost is not provided by the party that constructed the facility.

3.5 Valuation

3.5.1 Capitalized values shall include all costs incurred to bring PP&E to a form and location suitable for its intended use as outlined in Section 2.3 of this NPR.

3.5.2 Where a replacement of a component occurs due to a capital improvement, such as utility system in a facility, the accounts shall be appropriately adjusted to remove the values of items replaced (where those original values are \$100,000 or more). If only a portion of the property is being replaced and that portion is not separately identifiable in the accounting records, the value of the replaced portion must be estimated and the accounts adjusted accordingly. Removal of an item's recorded cost will be treated as a separate accounting transaction from the recording of additions or replacements. Replacements due to maintenance must be expensed.

3.5.3 If a reduction in the capitalized value of an asset occurs as a result of a modification and causes the value of the asset to drop below \$100,000, it shall be removed from the general ledger accounts

for capitalized PP&E.

3.5.4 Unrecorded Real Property.

3.5.4.1 Real property that is identified during inspections or inventories as found on station that has not been recorded shall be valued at its estimated value based on similar items, engineering estimates, or other reasonably supportable methodologies. If supporting documentation for the original acquisition is available, the property must be valued based on the supporting documentation.

3.6 Depreciation

3.6.1 See Section 2.6 for depreciation methods.

3.6.2 The useful life of real property acquisitions construction, and capital modifications shall be the recovery period as shown in Table 3.1 of this NPR.

3.6.3 Real Property PP&E acquisitions, construction, or capital modifications that meet the capitalization criteria shall be capitalized individually and depreciated over the recovery periods for modifications shown in Table 3.1.

3.6.4 Real Property Not Fully Depreciated. Modifications to real property that is not fully depreciated, that meet the capitalization criteria shall be capitalized and depreciated over the recovery periods for modifications shown in Table 3.1.

3.6.5 Real Property Modifications When The Asset Being Modified Is Fully Depreciated. Modifications to real property that is fully depreciated, that meet the capitalization criteria shall be capitalized individually and depreciated over the recovery periods for modifications shown in Table 3.1.

Table 3.1, RECOVERY PERIODS FOR REAL PROPERTY ASSETS

NASA RECOVERY PERIODS FOR REAL PROPERTY ASSETS (Excludes Heritage Assets)		
Description of General PP&E Assets	Recovery Period	
	Initial Acquisition	Modification/Improvement
Buildings, Hangars, Warehouses, Fuel Storage Buildings, Air Traffic Control Towers, and Other Real Property Buildings	40 Years	20 Years
Other Structures and Facilities	15 Years	5 Years
Improvements to Leased Buildings and Other Real Property (Leasehold Improvements)		Remainder of Lease Period or 20 Years, whichever is less.

3.7 Real Property not in use

3.7.1 See Section 2.5.3.

3.8 Disposal

3.8.1 See Section 2.5.2.

Chapter 4. Personal Property (General Equipment)

4.1 Overview

4.1.1 This chapter sets forth the accounting standards and policies related to NASA's personal property to assure compliance with statutory and regulatory requirements. These requirements ensure financial control over NASA-owned personal property, including both NASA-held and contractor-held.

4.1.2 This chapter applies to all NASA-owned and NASA-owned, contractor-held personal property, as well as equipment acquired or furnished under NASA grants and cooperative agreements with educational institutions and non-profit organizations. Contractor-held equipment is NASA-owned equipment in the possession of a contractor and includes NASA-furnished equipment, contractor-acquired equipment, and contractor-fabricated equipment.

4.2 Roles and Responsibilities

Refer to Section 1.6 of this NPR document.

4.3 Classification and Identification

4.3.1 Personal property can be classified as either collateral or non-collateral equipment, depending on the nature of the attachment of the equipment to and severability from a facility project.

4.3.2 Collateral equipment is not severable and is considered part of a facility through which it is installed. Examples of collateral equipment include building-type equipment, built-in equipment, and large, substantially affixed equipment normally installed as a part of a facility project, such as construction or modification. Collateral equipment shall be classified as real property as part of the facility in which it is being installed. Refer to Chapter 3 of this NPR document.

4.3.3 Non-collateral equipment, when acquired and used in a facility or test apparatus, can be severed and removed after construction without substantial loss of value or damage to the equipment or the premises where it is installed. Non-collateral equipment shall be classified as personal property and capitalized based on the criteria outlined in this chapter.

4.4 Capitalization Criteria

4.4.1 The following capitalization criteria apply to personal property PP&E acquisitions and fabrications. NASA shall capitalize individual items of PP&E acquired by purchase, transfer, donation, or exchange that meet all of the following criteria:

- a. Have an acquisition cost of \$100,000 or more.
- b. Have an estimated useful life of two years or more.
- c. Are not intended for sale in the ordinary course of operations.

d. Have been acquired or constructed with the intention of being used, or being available for use, by the Agency.

e. Have a current or planned alternative future use on another project with a separate objective. Institutional acquisitions are property used in normal operations not specific to a program or mission. Institutional acquisitions that are not defined as maintenance are presumed to have an alternative future use.

4.4.1.1 Items not meeting the above criteria or those specifically identified as prototypes, test articles, ST, or STE are considered R&D costs and are expensed in the period incurred.

4.4.1.2 Personal property PP&E items acquired as part of a bulk purchase that individually meet the capitalization criteria shall be capitalized in accordance with the policies established in this NPR. If the cost per item purchased in bulk does not meet the capitalization threshold, the bulk purchase must be expensed in the period acquired.

4.4.2 Modifications to existing personal property PP&E are considered single events and shall be capitalized as capital improvements when the modifications have an individual cost of \$100,000 or more and meet one of the following criteria:

- a. Extend the useful life of the asset by two years or more.
- b. Enlarge or improve its capacity.
- c. Upgrade it to serve needs different from, or significantly greater than, those originally intended.

4.4.2.1 Capital improvements are capitalized and depreciated. Modifications that do not meet the capitalization criteria are expensed.

4.4.3 Costs of personal property acquisitions and capital improvements meeting the capitalization criteria shall be segregated for identification and tracking through the establishment of unique WBS elements with capital asset indicators.

4.4.4 Maintenance costs incurred to maintain an asset in a useable condition do not meet the criteria for capitalization. Therefore, these costs are expensed when incurred.

4.5 Recognition

4.5.1 WIP (Assets Under Construction).

4.5.1.1 Costs of new fabrication or capital improvements of personal property that meet the capitalization criteria outlined above shall be captured as WIP through the establishment of unique WBS elements with capital asset indicators of AUC until the asset is placed in service.

4.5.1.2 The status of each new fabrication or capital improvement personal property project recorded as WIP shall be monitored on a monthly basis based on the percentage of completion. Once a project has reached 95 percent completion, information must be obtained to determine if the PP&E has been placed in service so that the PP&E can be recognized on a timely basis.

4.5.1.3 When PP&E being recorded in WIP is complete, the total capital cost recorded as WIP shall be transferred to capital PP&E. The capital balances transferred from WIP must be supported by sufficient supporting documentation, and any variances between the amount transferred and the supporting documentation must be reviewed and approved by the Agency Director of Financial Management prior to processing any manual adjustments.

4.5.2 In general, NASA shall recognize personal property PP&E when title to the asset passes to NASA. Title passage will occur either at the time of delivery and acceptance by a Government official or at an earlier contractually specified time. In the case of fabricated PP&E, the PP&E must be recorded as WIP until placed in service, at which time the balance will be transferred to capital PP&E.

4.5.2.1 For purchased equipment, the recognition date shall be based on the shipping terms of the contract or purchase order. This will be the date shown on the receiving and inspection report or equivalent source document evidencing the receipt, passage of inspection, and acceptance by the Government unless the contract or purchase order provides other specific terms of title passage.

4.5.2.2 For General PP&E assets acquired by a contractor on behalf of NASA, the recognition date shall be based upon delivery or constructive delivery either to the contractor performing the service or to a NASA facility. Delivery or constructive delivery must be based on the terms of the contract regarding delivery, receipt, and acceptance.

4.6 Valuation

4.6.1 Capitalized values shall include all costs incurred to bring PP&E to a form and location suitable for its intended use as outlined in Section 2.3 of this NPR.

4.6.1.1 If an item, as originally installed, is an aggregate of components that could stand alone (as opposed to parts) and are severable, those components shall be individually subjected to the capitalization criteria and only those components that meet the criteria are to be originally capitalized. If an item, as originally installed, is an aggregate of components that could not stand alone and are not severable, those components must be subjected to the capitalization criteria in aggregate.

4.6.1.2 If a personal property item that meets the capitalization criteria is taken delivery by and accepted by a NASA official prior to the end of the fiscal year and is capitalized, any related remaining cost paid in the next fiscal year shall be included in the capitalized value.

4.6.1.3 If an item does not meet the capitalization threshold at the end of the fiscal year, but related remaining costs paid the next fiscal year result in the total cost of the asset meeting the capitalization threshold, the entire cost of the asset shall be capitalized in the next fiscal year (assuming the other capitalization criteria are met).

4.6.2 Unrecorded Personal Property

4.6.2.1 Personal property that is identified during inspections or inventories as found on station that has not been recorded shall be valued at its estimated value based on similar items, engineering estimates, or other reasonably supportable methodologies. If supporting documentation for the original acquisition is available, the property must be valued based on the supporting documentation.

4.7 Depreciation

4.7.1 See Section 2.6.

4.8 Personal Property not in use

4.8.1 See Section 2.5.3.

4.9 Disposal

See Section 2.5.2.

Chapter 5. Internal Use Software

5.1 Overview

5.1.1 This chapter prescribes accounting policies and procedures for NASA internal use software (IUS). When accounting treatment for specific circumstances is not discussed in this chapter, reference should be made to SFFAS No. 10, Accounting for Internal Use Software, for guidance.

5.2 Roles and Responsibilities

Refer to Section 1.6 of this NPR document.

5.3 Capitalization Criteria

5.3.1 IUS. Software must be capitalized when all of the following conditions are met:

- a. Purchased commercially "off-the-shelf," internally developed, or contractor-developed solely to meet NASA's internal needs.
- b. Operated in a stand-alone mode and is not integrated or necessary to operate hardware or equipment. If not in stand-alone mode, it is subject to capitalization criteria of the asset in which it is integrated.
- c. Used to operate NASA's programs (i.e., financial and administrative software including that used for project management); or to support multiple NASA missions (i.e., communication software designed to support multiple missions). This would be software developed independently of a mission (i.e., not a part of the mission).
- d. Total project cost is \$1,000,000 or more.
- e. Expected useful life is five years or more.

5.3.2 NASA shall not capitalize:

- a. Software developed as part of a research effort (i.e. algorithm).
- b. Software integrated into and necessary to operate a NASA asset. Such software is subject to capitalization criteria of the asset in which it is integrated.
- c. Software that NASA does not own outright or for which NASA does not own a lease to operate.
- d. Data conversion, maintenance, and training costs.
- e. Costs incurred solely to repair a design flaw in software.
- f. Costs incurred to develop "free software" to be released to the public or other Federal agencies for purposes of advancing scientific and technological knowledge.

5.4 Valuation

5.4.1 NASA shall expense costs incurred during the Formulation Phase of the life cycle for internal

use software as R&D costs. NASA must also expense costs during the Operational Phase, which begins when final acceptance testing has been successfully completed.

5.4.2 NASA shall capitalize costs incurred during the software development (Implementation Phase) phase of the life cycle for IUS. Capitalized costs are accumulated as WIP until final acceptance testing has been successfully completed. Once completed, the costs are transferred to PP&E, with amortization expense recognized on a periodic basis using the straight-line method, beginning in the month the IUS was capitalized. Such cost must be limited to cost incurred after:

- a. Management authorizes and commits to a computer software project and believes that it is more likely than not that the project will be completed and the software will be used to perform the intended function with an estimated service life of five years.
- b. The completion of conceptual formulation, design, and testing of possible software project alternatives (the preliminary design stage).

5.4.3 Capitalized costs include those for new software (i.e., salaries of programmers, systems analysts, project managers, and administrative personnel, associated employee benefits, outside consultants' fees, rent, and supplies) and documentation manuals.

5.4.4 For commercial, off-the-shelf (COTS) software, capitalized cost shall include the amount paid to the vendor for the software. For contractor-developed software, capitalized cost will include the amount paid to a contractor to design, program, install, and implement the software. Material internal cost incurred by the Federal entity to implement the COTS or contractor-developed software and otherwise make it ready for use must be capitalized.

5.4.5 For enhancements to existing IUS, the FASAB specifies the following in SFFAS No. 10:

5.4.5.1 The acquisition cost of enhancements to existing IUS (and modules thereof) shall be capitalized when it is more likely than not that they will result in significant additional capabilities.

5.4.5.2 The cost of minor enhancements resulting from ongoing systems maintenance shall be expensed in the period incurred.

5.4.5.3 Costs incurred solely to repair a design flaw or to perform minor upgrades that may extend the useful life of the software without adding capabilities shall be expensed.

5.4.6 Material expenditures that add capability or functionality are capitalized while expenditures that result in extending useful life are expensed.

5.4.7 Costs incurred after final acceptance testing has been successfully completed shall be expensed. The likely types of costs that can be incurred during the Post-Implementation/Operational phase are associated with the following:

- a. Operate the software, undertake preventive maintenance, and provide ongoing training for users.
- b. Convert data from the old to the new system.
- c. Undertake post-implementation review comparing asset usage with the original plan.
- d. Track and accumulate life-cycle costs and compare it with the original plan. All data conversion costs incurred for internally developed or COTS software shall be expensed as incurred, including the cost to develop or obtain software that allows for access or conversion of existing data, reconciliation or balancing data, and the creation of new/additional data.

5.4.8 Software integrated into and necessary to operate an asset is to be capitalized as part of the asset in which it is integrated.

5.4.9 Modules of a software project are amortized when the module has been successfully tested. If a module is dependent on the completion of another module, amortization begins when both modules have been successfully tested.

5.4.10 The acquisition cost of enhancements to existing IUS (and modules thereof) is capitalized when it is more likely than not that the enhancements will result in significant additional capabilities.

5.4.11 For software bundled products and services, the capital and non-capital costs of the package are allocated among individual elements on the basis of a reasonable estimate of their relative fair values.

5.4.12 The standard establishes the following principles for expensing costs of IUS:

5.4.12.1 Data Conversion. Data conversion costs incurred for internally developed, contractor-developed, or COTS software are expensed as incurred, including the cost to develop or obtain software that allows for access or conversion of existing data to the new software. Such costs may include the purging or cleansing of existing data, reconciliation or balancing of data, and the creation of new or additional data.

5.4.12.2 Training Costs. Training costs incurred for internally developed, contractor-developed, or COTS software are expensed as incurred, except training costs incurred to make the software initially implementable and ready for use. Training costs incurred to make the software initially implementable and ready for use shall be added to the cost of the software and capitalized, if it meets the capitalization criteria.

5.4.12.3 Minor Enhancements. The cost of minor enhancements resulting from ongoing systems maintenance and costs incurred solely to repair a design flaw are expensed.

5.4.12.4 Minor Upgrades. The costs of minor upgrades that may extend the useful life of the software without adding capabilities are expensed.

5.4.13 For the accounting and reporting of software licenses, NASA has adopted the FASAB's suggestion in Paragraph 67 of SFFAS No. 10 that lease accounting concepts and the entity's policy for capitalization thresholds be applied. If the license agreement meets one or more of the following criteria and NASA's software capitalization threshold, it is considered a capital lease:

- a. The lease transfers ownership of the software to NASA by the end of the lease term.
- b. The lease contains an option to purchase the leased software at a bargain price.
- c. The lease term is equal to or greater than 75 percent of the estimated economic life of the leased software. This must be equal to or greater than the present value of the software license payments.
- d. The present value of rental and other minimum lease payments, excluding that portion of the payments representing executory cost, equals or exceeds 90 percent of the fair value of the leased software. To evaluate this criterion, determine the purchase price of the software and multiply it by 90 percent. This amount must be equal to or greater than the present value of the software license payments (if it is a standard COTS software, various sources could be used to provide the list price for the software package).
- e. Note: The last two criteria (c. and d.) are not applicable if the beginning of the lease term falls within the last 25 percent of the total estimated economic life of the leased PP&E.
- f. Note: Annual lease/renewals are not considered capital leases.

5.4.14 The following software costs must be captured for capitalization purposes:

5.4.14.1 Bundled Products and Services. Allocate the capital and non-capital cost of the package among the individual elements on the basis of a reasonable estimate of their relative fair values. For example, training, maintenance, or data conversion elements included in the package will be expensed; the software package, software implementation, installation, and testing elements shall be capitalized.

5.4.14.2 Contractor Developed Software. The amount paid to a contractor during the implementation phase and material internal costs incurred by NASA to implement the software and otherwise, make it ready for use, up through acceptance testing.

5.4.14.3 Internally Developed Software. The cost incurred through acceptance testing.

5.4.14.4 COTS Software. The amount paid to the vendor for the software (purchase or lease) and material internal costs incurred by NASA to implement the software and otherwise make it ready for use through acceptance testing.

5.4.15 Software Developed in Modules. Software developed in modules (including pilots) shall be accounted for as follows:

5.4.15.1 If the modules are implemented and operated independently, the software shall be accounted for based on the cost and expected useful life of each module. The useful life of independently implemented software starts on the date the software becomes operational.

5.4.15.2 If the modules are interdependent, the costs and life cycle shall be the combined cost and life of the modules, which must be implemented together.

5.4.16 Bulk Purchase. Bulk purchases of the same software acquired under the same contract shall be accounted for as a group. If the same software package is purchased under two or more contracts, costs must be accounted for and thresholds applied separately. Software acquired through separate contracts must be accounted for separately.

5.4.17 Software Licenses. Multi-year licenses are capitalized if the total projected cost is \$1,000,000 or more and the expected useful life of the software is five years.

5.4.18 Enhanced Software. Enhancement costs for existing software shall be capitalized if the enhancement results in significant additional capability beyond that for which the software was originally intended, the total cost of the enhancement is \$1,000,000 or more, and the expected useful life of the enhanced software is five years. The capitalized cost will include the same types of cost discussed above in Section 5.4.5. Costs incurred solely to repair a design flaw or perform minor upgrades must not be capitalized. A significant additional capability is considered a capability not included in original software specifications and which costs \$1,000,000 or more to develop (excluding all other updates to the software).

5.4.19 If software is being capitalized, but becomes unusable (impaired), this shall be brought to the attention of the Agency OCFO, Director for Financial Management.

5.4.20 Software costs associated with terminated projects and/or subprojects shall be expensed.

5.5 Amortization

5.5.1 IUS that is capitalized pursuant to the SFFAS No. 10, Accounting for Internal Use Software, and requirements established in this chapter shall be amortized over the estimated useful life of five years.

5.6 Disposal

5.6.1 NASA shall recognize disposals when software is determined to be obsolete or nonfunctional. NASA will not report fully depreciated software projects. Refer to Chapter 2, of this NPR for more detailed discussion of disposal of capital PP&E.

Chapter 6. Capital Leases

6.1 Overview

6.1.1 This chapter prescribes accounting policies and procedures for PP&E leased by NASA and subject to capitalization.

6.2 Roles and Responsibilities

Refer to Section 1.6 of this NPR document.

6.3 Identification

6.3.1 Proper and timely identification of capital leases of PP&E by the responsible officials are essential for the control, accounting, and reporting of capitalized assets. The Center CFO office shall review and document its assessment of the lease agreement and submit to the Agency OCFO, Property Branch for concurrence in determining if it is a capital lease and if the asset meets the Agency criteria for capitalization. (See NPR 4200.1, NASA Equipment Management Procedural Requirements, Section 3.4.4.4).

6.3.2 Unique WBS elements are not used for acquisition by capital leasing. The lease agreement is the supporting document. Due to the nature of capital leases, the AFUQ, NASA Form 1739 does not apply.

6.4 Capitalization Criteria

6.4.1 Capital Leases. PP&E under a lease where the terms of the agreement are essentially equivalent to an installment purchase of PP&E and the capitalization criteria outlined below are met shall be capitalized. In accordance with OMB Circular No. A-11, Preparing and Submitting Budget Estimates, Section 33 and Appendix B, and the Budgetary Enforcement Act of 1990, for all lease-purchases and leases of capital assets, there must be sufficient budgetary resources up front to cover the present value of the lease payments discounted using Treasury interest rates.

6.4.2 Capitalization Criteria.

6.4.2.1 Leased PP&E is subject to capitalization if its fair value is \$100,000 or more and the terms of the agreement are equivalent to an installment purchase by meeting any one of the following criteria.

- a. The lease transfers ownership to NASA at the end of the term.
- b. The lease contains an option to purchase at a bargain price.
- c. The non-cancelable length of the lease is equal to or greater than 75 percent of the estimated economic life of the PP&E.
- d. The present value of the rental or other minimum lease payments, excluding that portion of the payments that represents executory costs, such as insurance, maintenance, and taxes to be paid by NASA, equals or exceeds 90 percent of the fair value of the PP&E.

e. Note: The last two criteria are not applicable if the beginning of the lease term falls within the last 25 percent of the total estimated economic life of the leased PP&E. The rental of space from General Services Administration (GSA) does not qualify as leased PP&E subject to capitalization.

6.5 Valuation

6.5.1 The present value of the minimum lease payments shall be computed using the Treasury Average Interest Rate for Marketable Interest-Bearing Debt, unless it meets the following two conditions:

- a. It is practicable for NASA to obtain the interest rate implicit in the lease computed by the lessor.
- b. The implicit rate computed by the lessor is less than the Treasury Average Interest Rate for Marketable Interest-Bearing Debt.

6.6 Recognition

6.6.1 Each item of leased property that meets the capitalization criteria shall be treated as a single event, and all costs incurred in relation to that event, regardless of when they are paid, must be recorded in the general ledger as an asset. The total cost of each leased property item will be considered a single event, regardless of whether or not the work was performed on multiple contracts.

6.6.2 Leased PP&E that meets the above criteria shall be recorded as an asset.

6.6.3 The amount recorded shall be equal to the amount recognized as a liability for the capital lease at its inception (the net present value of the lease payments calculated as discussed above, unless the net present value exceeds the fair market value of the PP&E, in which case the liability shall be the fair value).

6.6.4 Interest expenses shall be recognized as a portion of the lease payments and will be calculated based on the interest rate used to compute the present value of the minimum lease payments.

6.7 Amortization

6.7.1 The recorded cost (fair value) of the leased asset shall be amortized over the life of the lease.

6.8 Disposal

6.8.1 If an asset under capital lease is disposed prior to the completion of the capital lease term, it shall be recorded by removing the asset and the corresponding capital lease liability account and accumulated depreciation on capitalization.

6.8.2 Any loss on the disposition of the asset under capital lease shall be recognized and recorded at the time of the disposal of the asset under capital lease.

6.9 Reporting

6.9.1 Reporting Requirements. Leased PP&E subject to capitalization are reported in the Capital Leases Report, submitted to the Agency OCFO. All other PP&E leased for periods in excess of one

year, including capitalized leases less than \$100,000, and those agreements where NASA is the lessor shall be reported in the Operating Leases Report.

Chapter 7. Heritage Assets

7.1 Overview

7.1.1 This chapter establishes the accounting policies for heritage assets.

7.2 Roles and Responsibilities

Refer to Section 1.6 of this NPR document.

7.3 Identification

7.3.1 When capitalized assets are identified as heritage assets by a NASA Center, their values shall be removed from the PP&E accounts and a copy of the SAP Asset Accounting Document for the transaction must be forwarded to NASA Headquarters, OCFO Property Branch for retention and documentation for the preparation of the required annual supplementary reporting. The Center will also notify the Agency OCFO, Property Branch when it becomes aware of the existence of a heritage asset.

7.3.2 Contractors are required to provide information on heritage assets in their possession in their annual NF1018 submissions. Those contractors required to report monthly in CHATS shall also identify the heritage assets in their possession.

7.4 Capitalization and Valuation

7.4.1 The costs of acquiring, constructing, improving, reconstructing, or renovating heritage assets shall be considered an expense in the period incurred when determining the net cost of operations.

7.4.2 Assets that serve both heritage and operational functions are considered multiuse when the predominant use is for Government operations. Multiuse heritage assets are reported in the general ledger asset accounts. Capital renovation, improvement, or reconstruction costs to facilitate Government operations (for example, installation of communication wiring or redesign of office space) are depreciated over its expected useful life as defined in Chapter 2.

7.4.3 For multiuse heritage assets, the costs of renovating or reconstructing the heritage asset that cannot be associated directly with operations shall be considered heritage asset costs and included as expense in calculating net costs.

7.4.4 Heritage assets shall be quantified in terms of physical units (for example, number of items in collections or the number of national parks). No asset amount will be shown on the balance sheet of the Federal financial statements for heritage assets.

7.4.5 The costs of acquiring, constructing, improving, reconstructing, or renovating heritage assets must be considered an expense in the period incurred when determining the net cost of operations. The cost shall include all costs incurred to bring the heritage asset to its current condition and location.

7.5 Reporting

7.5.1 Heritage assets shall be reported in a note to the financial statements. The note will provide the number of physical assets by major category, the number by category acquired and withdrawn during the reporting period, and a description of the major methods of acquisition and withdrawal during the reporting period. In addition, the Agency will disclose in the footnotes how heritage assets are related to the mission of the entity, a description of the heritage assets, stewardship responsibilities, and their condition. Condition of the heritage assets may be reported with the deferred maintenance information in the required supplementary information.

Chapter 8. Operating Materials and Supplies

8.1 Overview

8.1.1 This chapter prescribes accounting policies for materials and supplies acquired by NASA for use in its R&D projects and other operations. NASA follows the purchases method of accounting for its Operating Materials and Supplies (OM&S). The purchases method provides that OM&S be expensed when purchased.

8.2 Roles and Responsibilities

Center CFOs shall ensure that adequate financial controls are in place to ensure that the financial records and reports appropriately account for the cost of OM&S as period expenses.

Appendix A. Definitions

A.1 Abandoned. A condition in which the facility or other General PP&E asset has been "walked away from" or if no maintenance of any part of the property is being accomplished. There are no plans for future reactivation and plans have been made to demolish or declare the asset item as excess at the earliest practical date.

A.2 Acquisition. The act of taking legal title to tangible assets. There are various channels available in the Federal sector for tangible asset acquisition, such as purchase, fabrication, construction, transfer, lease, trade-in, and exchange.

A.3 Acquisition Cost. Acquisition cost is the original purchase, construction, or development cost, and includes all costs incurred to bring the property to a form and location suitable for its intended use, net of (less) any purchase discounts.

A.4 Agency-Peculiar Equipment. Completed items, systems and subsystems, spare parts, and components unique to NASA aeronautical and space programs. Examples include research aircraft, reusable space vehicles, ground support equipment, prototypes, and mock-ups.

A.5 Alternative Future Use. Having a current or planned alternative future use on another project with a separate objective identified at the beginning of a project or at the time the purchase occurred or fabrication commenced.

A.6 Asset Attribute. An attribute in Mdm (Metadata Manager) to identify capital assets at the individual WBS component level. When enabled, the asset attribute will be used to identify those WBS elements that support capital asset acquisition. The five WBS asset attribute types available are based on the type of asset acquisition the WBS will be supporting as follows:

- a. Theme assets.
- b. Software (Internal use software \$1M and over).
- c. Real property.
- d. PP&E - Fabricated capital assets.
- e. PP&E - Purchased capital assets.

A.7 Bargain Price. Price (less than fair market value) at which NASA has the option to purchase leased PP&E which makes exercise of the option almost certain.

A.8 Buildings, Improvements, and Renovations. Buildings, improvements, and renovations include costs of buildings, improvements and renovations to buildings, and fixed equipment required for the operation of a building that is permanently attached to and a part of the building and cannot be removed without cutting into the walls, ceilings, or floors. Examples of fixed equipment required for functioning of a building include plumbing, heating, lighting equipment, elevators, central air conditioning systems, and built-in safes and vaults.

A.9 Bulk Purchase. Bulk purchase for capitalization purposes is defined as a single acquisition of many separate items that, if purchased individually, would not be material, but is considered material when purchased as a single acquisition or a single acquisition of many separate items with some of the items being individually material.

A.10 Bundled Software Products and Services. A suite of software products or services (i.e.

training, maintenance, data conversion, reengineering, site licenses, and rights to future upgrades and enhancements).

A.11 Capitalized Assets. Assets with a unit acquisition cost of \$100,000 or more, an estimated useful life of two years or more, which are not intended for sale in the ordinary course of operations, and that have been acquired or constructed with the intention of being used or being available for use by the Agency.

A.12 Capitalized Internal Use Software. Software that meets all of the following criteria:

- a. Is purchased from a commercial vendor "off-the-shelf," internally developed, or contractor-developed solely to meet the entity's internal or operational needs.
- b. Operates in a stand-alone mode and is not integrated or necessary to operate hardware or equipment.
- c. Used to operate NASA's programs (i.e., financial and administrative software including that used for project management) or to support NASA's missions (i.e., communication software designed to support multiple missions). This would be software developed independently for a mission (i.e., not part of the mission).
- d. Total projected cost is \$1,000,000 or more.
- e. Has an expected useful life of five years.

A.13 Capital Lease. Property lease that is equivalent to an installment purchase of property and meets the criteria of this NPR. In accordance with OMB Circular No. A-11, Preparing and Submitting Budget Estimates, (Section 33 and Appendix B), for all lease purchases and leases of capital assets, there must be sufficient budgetary resources upfront to cover the present value of the lease payments discounted using U.S. Treasury interest rates.

A.14 Collateral Equipment. Building-type equipment, built-in equipment, and large, substantially affixed equipment normally acquired and installed as a part of a facility project. The removal of such equipment would impair the usefulness, safety, or environment of the facility and would involve substantial cost because of the special or unique services required for the initial installation.

A.15 Commercial Off-The-Shelf (COTS) Software. Software purchased, leased, or licensed from a vendor and ready for use with little or no change.

A.16 Contractor Developed Software. Software designed, programmed, installed, and implemented by a NASA contractor, including new software and modifications of existing or purchased software without substantive NASA employee involvement other than contract monitoring.

A.17 Contractor-Acquired Property. Property procured or built by a contractor pursuant to the terms of the contract, but paid for and owned by NASA.

A.18 Contractor-Held Property. Contractor-held property is NASA-owned property in the possession of a contractor, whether furnished by NASA or acquired or fabricated by the contractor under the terms of the contract.

A.19 Data Conversion. Data conversion includes conversion of existing data, reconciliation, or balancing data and the creation of new/additional data.

A.20 Depreciable Basis. The depreciable basis of a General PP&E asset is the recorded cost reduced by the asset's salvage value. NASA's PP&E is presumed to have no residual/salvage value

and therefore, residual/salvage value does not affect the depreciable basis in determining depreciation. Land is not subject to depreciation. Land rights that are for a specified period of time shall be amortized over the specified time period. When land and a building are purchased together, the depreciable basis for the building is the total purchase cost less the actual cost or estimated value of the land.

A.21 Depreciation. Depreciation is the systematic and rational allocation of the cost of General PP&E less its estimated salvage or residual value over the estimated useful life of the General PP&E. Depreciation expense will be recognized on all General PP&E, except for land and land rights of unlimited duration.

A.22 Development. Development is the translation of research findings or other knowledge into a plan or design for a new product or process or for a significant improvement to an existing product or process whether intended for sale or use. Development includes the conceptual formulation, design, and testing of product alternative, construction of prototypes, and operation of pilot plants. It does not include routine or periodic alterations to existing products, production lines, manufacturing processes, and other ongoing operations, even though those alterations may represent improvement, and it does not include research or market testing activities.

A.23 Estimated Economic Life. Estimated remaining period during which the PP&E is expected to be economically usable by one or more users, with normal repairs and maintenance, for the purpose for which it was intended at the inception of the lease, without limitation by the lease term.

A.24 Excess Property. Property that is no longer required for an Agency's needs, as determined by the Agency head or designee.

A.25 Equipment. Tangible items of a durable nature used in operations, including, but not limited to, items such as word processors, typewriters, personal computers, calculators, furniture, copiers, machinery, and Automatic Data Processing (ADP) equipment (excluding ADP software).

A.26 Fabrication. Fabrication is the process of building or constructing a part or end item (i.e., satellites, Space Shuttle, space station, etc.). Multiple materials and supplies can be used and incorporated in a fabrication.

A.27 Facility Project. Consolidation of applicable specific individual facility work, including related collateral equipment, required to fully reflect all of the needs, generally relating to one facility, which have been or may be generated by the same set of events and are required to be accomplished at one time in order to provide for the planned initial operational use of the facility or a discrete portion thereof.

A.28 Fair Value. The price for which an asset could be bought or sold in an arm's-length transaction between unrelated parties (e.g., between a willing buyer and a willing seller). For capitalized assets, the determination of fair value will be documented and the documentation retained in accordance with NPR 1441.1, NASA Records Retention Schedules.

A.29 Federal Accounting Standards Advisory Board (FASAB). Board created to consider and recommend the accounting standards and principles for the Federal Government to improve the usefulness of Federal financial reports.

A.30 Formulation Phase. The assessment of feasibility, technology and concepts, risk assessment, team building, development of operations concepts and acquisition strategies, establishment of high-level requirements and success criteria, the preparation of plans, budgets, and schedules essential to the success of a program or project, and the identification of how the program or project supports the Agency's strategic needs, goals, and objectives.

A.31 Free Software. Software released to the public or other Federal agencies that advances scientific and technological knowledge, but is not used in NASA's operations. The development of such software is consistent with NASA's mission, but is not acquired or constructed with the intention of being used or being available for use by NASA.

A.32 Heritage Assets. Heritage assets are PP&E that are unique for one or more of the following reasons:

- a. Historical or natural significance.
- b. Cultural, educational, or artistic (i.e. aesthetic) importance.
- c. Significant architectural characteristics.

A.33 Impaired Software. Software no longer expected to provide substantive service potential that will be removed from service or software that has incurred a significant reduction in capability, function, or use (or a module thereof).

A.34 Implementation Phase. Consists of design (including configuration and interfaces), coding, installation of hardware, and testing (including parallel processing, if needed).

A.35 Improvements to Land. Improvements to land includes the cost of nonpermanent, depreciable improvements to land used in general operations. Also includes similar costs to land subject to stewardship reporting, as well as land rights of limited duration that are associated with general operations. The distinction between land and land improvements is that while land has an indefinite life and non-depreciable, land improvements have an estimated useful life (finite life), and it is capitalized and depreciated. Examples of land improvements include the cost of parking lots, driveways, fences, lawn, and garden sprinkler systems. The costs of land improvements are capitalized and depreciated.

A.36 In-grant. An in-grant is an agreement between NASA and another entity, by which NASA is allowed to use the property owned by the other entity.

A.37 Institutional Acquisitions. Institutional acquisitions are property used in normal operations not specific to a program or mission.

A.38 Integrated Software. Computer software integrated into and necessary to operate PP&E, rather than a stand-alone application.

A.39 Interest Rate Implicit in the Lease. Discount rate that, when applied to the minimum lease payments (less executory costs and unguaranteed residual value), causes the aggregate present value at the beginning of the lease term to be equal to the fair value of the leased PP&E at the inception of the lease.

A.40 Internally Developed Software. Software developed by NASA employees, including new software and existing or purchased software being modified with or without the assistance of contractors.

A.41 Internal Use Software. Internal use software is software that is purchased from commercial vendors "off-the-shelf," internally developed or contractor-developed solely to meet the entity's internal or operational needs. It is software that is:

- a. Used to operate an entity's programs (i.e., financial and administrative software, including that used for project management).
- b. Used to produce the entity's goods and to provide services (i.e., air traffic control and loan

servicing).

c. Developed or obtained for internal use and subsequently provided to other Federal entities with or without reimbursement.

A.42 Land and Land Rights. Land and land rights include the identifiable cost of land and land rights of unlimited duration acquired for or in connection with general property, plant, and equipment used in general operations and permanent improvements. Land and land rights accounts include not only the land, but also the rights to it, such as easements.

A.43 Leasehold Improvements. Leasehold improvements includes NASA-funded costs of long-term capital improvements to leases, rights, interests, and privileges relating to land not owned by NASA, such as easements, right-of-ways, permits, use agreements, air rights, water rights, and mineral rights. Leasehold improvements also include NASA-funded costs of improvements made to buildings, structures, and facilities, as well as easements and right-of-way, where NASA is the lessee or the cost is charged to a NASA contract.

A.44 Maintenance. The recurring day-to-day work that is required to maintain and preserve PP&E in a condition suitable for it to be utilized for its designated purpose. It is normally worked to correct wear and tear before major repair is required.

A.45 Minimum Lease Payments. Payments NASA is obligated to make or can be required to make in connection with leased PP&E.

A.46 Modification. An alteration of an existing piece of property. A modification may or may not increase the useful life of the property being modified. Modifications may extend the useful life, enlarge or improve its capacity, or change or enhance performance or functionality of the item. Only modifications that meet the capitalization criteria are added to the book value of the asset.

A.47 . Mothballed. A condition where a facility or any other General PP&E asset has been deactivated, and appropriate maintenance measures have been taken to prevent deterioration of its vital or essential systems or placed in protective storage. Higher first-year costs would be expected because of preparations for mothballing, but future annual costs should be significantly lower due to reduced maintenance and repair requirements. Total time to deactivate and then to reactivate the facility, including the mothballed period, is expected to exceed 12 months.

A.48 Multi-use Heritage Assets. Heritage assets used to serve both heritage and Government operations functions are considered multiuse heritage assets if the predominant use is in general Government operations.

A.49 Noncancelable. A PP&E lease is considered noncancelable if it can only be canceled under one of the following conditions: (1) upon occurrence of a remote contingency, (2) with the permission of the lessor, (3) the lessee enters into a new lease with the same lessor, or (4) the lessee incurs a penalty in such amount that continuation of the lease appears, at inception, reasonably assured.

A.50 Non-Collateral Equipment. Equipment other than collateral equipment. Such equipment, when acquired and used in a facility or a test apparatus, can be severed and removed after erection without substantial loss of value or damage thereto or to the premises where installed. (See also Collateral Equipment.)

A.51 Operating Materials and Supplies (OM&S). OM&S is composed of tangible personal property to be consumed in normal business operations.

A.52 Operational Phase. Consists of data conversion, application maintenance, training, and

deployment. Typically referred to as Phase E of the information technology project, the project deploys and operates the system developed in previous phases. During this phase, the project team that developed the system typically turns over responsibility for operation of the system to an operations team.

A.53 Operating/Program Expenses. Expenses incurred in conducting ordinary activities of NASA. Expenses result in outflows of assets or occurrences of liabilities. Excludes capital expenditures, unfunded expenses, and cost of goods sold.

A.54 Other Structures and Facilities. Other structures and facilities include costs of acquisitions and improvements of structures and facilities other than buildings; for example, airfield pavements, harbor and port facilities, power production facilities and distribution systems, reclamation and irrigation facilities, flood control and navigation aids, utility systems (heating, sewage, water and electrical) when they serve several buildings or structures, communications systems, traffic aids, roads and bridges, railroads, monuments and memorials, and nonstructural improvements such as, sidewalks, parking areas, and fences.

A.55 Out-grant. An out-grant is an action by NASA granting certain rights such as leasehold, permits, and easements to the grantees to use NASA-owned property in accordance with the terms and conditions of the grant and/or agreement.

A.56 Property Plant and Equipment (PP&E). Tangible assets, including land, that meet all of the following criteria:

- a. Have estimated useful lives of two years or more.
- b. Are not intended for sale in the ordinary course of operations.
- c. Have been acquired or constructed with the intention of being used or being available for use by the entity.

A.57 Real Property. Land, buildings, other structures and facilities, and leasehold improvements.

A.58 Recorded Cost. The recorded cost is the acquisition cost of an asset plus any ancillary costs required to bring the asset to a form and location for its intended use.

A.59 Repairs. The restoration or replacement of a deteriorated item of PP&E, such that it may be utilized for its designated purpose.

A.60 Research. Research is a planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product service, process, or technique or in bringing about a significant improvement to an existing product or process.

A.61 Salvage Value. The salvage value, also known as the residual or scrap value, is the amount that would be expected to be obtained from selling the asset at the end of its useful life, but only when such proceeds (from recycle, resale, salvage, etc.) are permitted to be retained and used by NASA. Typically, personal property (i.e., vehicles and equipment) will not have a salvage value. If the asset is to be traded in on a new asset, the salvage value is the expected trade-in value. For purposes of computing depreciation, real property assets (i.e., buildings, facilities, and structures) do not have salvage values.

A.62 Software. Application and operating system programs, procedures, rules, and any associated documentation pertaining to the operation of a computer system or program.

A.63 Software Life-Cycle Phases. The phases through which a software application or information

system passes, typically characterized as formulation, implementation, and operation.

A.64 Special Tooling. Special tooling means jigs, dies, fixtures, molds, patterns, taps, gauges, and all components of these items, including foundations and similar improvements necessary for installing special test equipment, and which are of such a specialized nature that without substantial modification or alteration, their use is limited to the development or production of particular supplies or parts thereof or to the performance of particular services. Special tooling does not include material, special test equipment, real property, equipment, machine tools, or similar capital items.

A.65 Special Test Equipment. Special test equipment is "either single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special purpose testing in performing a contract. It consists of items or assemblies of equipment, including foundations and similar improvements necessary for installing special test equipment, and standard or general purpose items or components that are interconnected and interdependent so as to become a new functional entity for special testing purposes. Special test equipment does not include material, special tooling, real property, and equipment items used for general purposes or property that, with relatively minor expense, can be made suitable for general purpose use."

A.66 Standby. Condition where a facility or any other General PP&E asset that is temporarily not in use and appropriate maintenance measures have been taken to maintain its vital or essential operating systems in a state of readiness or availability for future use. Selective life-cycle cost effective facilities maintenance and repair are required. Total time to deactivate and then to reactivate the facility, including the standby period, is expected to be less than 12 months.

A.67 Theme Assets. Assets that are the principal products of theme projects that have the possibility of an alternative future use/benefit. Theme assets will, therefore, be treated as capitalized PP&E, which is capitalized and depreciated in accordance with generally accepted accounting principles.

A.68 Theme Projects. Space exploration items that are specifically designed for use in a NASA program, (i.e., NASA developed and/or funded scientific experiments intended to operate outside the atmosphere).

A.69 Useful Life. The normal operating life in years, in terms of utility to NASA.

A.70 Work- in-Process (WIP). WIP consists of the costs (i.e., procured materials, labor, travel, etc.) related to the design and fabrication of an asset to bring it to a form and location for its intended use, until such time as it is considered operational.

Appendix B. Acronyms

AFUQ	Alternative Future Use Questionnaire
CFO	Chief Financial Officer
CHATS	Contractor Held Asset Tracking System
CLIN	Contract Line Item Number
CMP	Continuous Monitoring Program
DCFO	Deputy Chief Financial Officer
DCFO(F)	Deputy Chief Financial Officer (Finance)
EPSS	Enterprise Performance Support System
EUP	End User Procedures
FAR	Federal Acquisition Regulation
FASAB	Federal Accounting Standards Advisory Board
FFP	Firm Fixed Price
FIFO	First-In, First-Out
FPMR	Federal Property Management Regulations
FSC	Federal Supply Classification
GSA	General Services Administration
IUS	Internal Use Software
MdM	Metadata Manager
NEF	NASA Electronics Forms
NFS	NASA FAR Supplement
NRPI	NASA Real Property Inventory
NSN	National Stock Number
NSTS	National Space Transportation System
OCFO	Office of the Chief Financial Officer
ODIN	Outsourcing Desktop Initiative for NASA
OM&S	Operating Materials and Supplies
OMB	Office of Management and Budget
PP&E	Property, Plant, and Equipment
PR	Procurement Requests
QAE	Quality Assurance Evaluation
R&D	Research and Development

RPO	Real Property Officer
SEMO	Supply and Equipment Management Officer
SFAS	Statement of Financial Accounting Standards
SFFAS	Statements of Federal Financial Accounting Standards
USSGL	United States Standard General Ledger
WBS	Work Breakdown Structure
WIP	Work-in-Process

Appendix C. References

C.1 NPD 1200.1, NASA Internal Control

C.2 NPD 1440.6, NASA Records Management

C.3 NPR 4100.1, NASA Materials Inventory Management Manual

C.4 NPR 4300.1, NASA Personal Property Disposal Procedural Requirements

C.5 NPR 7123.1, NASA Systems Engineering Processes and Requirements

C.6 NPR 7150.2, NASA Software Engineering Requirements